

REMARKS

Applicants appreciate the thorough examination of the application that is reflected in the Office Action dated June 15, 2004. Claims 1-5, 8-10, 13, 15, 16-19, 22-23, 27, 28-31, 34-35, 37 and 38 are pending in the application. Reconsideration of the application is respectfully requested.

Art-based Rejections

The Official Action rejects claims 1 and 38 under 35 U.S.C. 102(e) as allegedly being anticipated by the Hsu et al. publication (US 2003/0054807) (hereinafter "Hsu"), rejects claims 1-3, 5, 15-17, 19, 27-29, 31, 37 and 38 under 35 U.S.C. 103(a) as being unpatentable over the Sato et al. publication (WO 01/80590 A1) (hereinafter "Sato") in view of Hsu, and rejects claims 4, 8-10 and 13, 18, 22, 23, 30, 34 and 35 under 35 U.S.C. 103(a) as being unpatentable over Sato further in view of Hsu and Chang et al. (U.S. Patent Publication 2002/0102967).

In rejecting claim 1, the Office cites ¶60 of the Hsu reference. Paragraphs 0058 through 0060 of Hsu state:

[0058] FIG. 4 illustrates a message sequence diagram, shown generally at 102, of an embodiment of the present invention. The **message sequence diagram represents MBS set up and monitoring** that is performed pursuant to an embodiment of the present invention.

[0059] First, and as indicated by the segment 104, a primary service instance, designated by the segment 104, is initiated by the mobile station. Segments 106, 108, and 112 are representative of MBS setup procedures, here a header compression, an RTSP exchange, and security signaling, respectively. The primary service instant initiation request generated by the mobile station is also generally considered to form part of the MBS setup.

[0060] Then, and as indicated by the segment 114, a **broadcast service parameter message**, is generated, here by the base station controller/packet control function 22 and sent to the mobile station. The message **includes one or more of the common service parameters and channel-specific parameters**. Thereafter, and as indicated by the segments 116, multibroadcast service traffic is effectuated between the data server 32 and the mobile station 12. RTP/UDP/IP **header compression** is here further shown to be utilized. (Emphasis added.)

In the Office Action dated June 15, 2004, the Office responds to Applicants' arguments filed on April 22, 2004 by stating that:

"As taught by Hsu in paragraphs 59 and 60, MBS traffic is sent from the service provider in which the MBS traffic includes a RTP/UDP/IP header, (fig. 4). As stated also in paragraph 13 of Hsu, Multicast and Broad services (MBS) is also referred to as Broadcast and Multicast Services (BCMCS). Therefore, it is clear that as least paragraphs 59-60 and fig. 4, teaches using a BCMCS_ID service and wherein an IP multicast address and UDP port number are associated with the BCMCS, ("IP multicast address and UDP port number are associated with said BCMCS_ID"). Furthermore, as further explained below, the MBS ID identifies a broadcast service since the MBS comprises a broadcast service message.

As shown in paragraphs 20-22, the broadcast service parameter message (MCMCS_ID) has multiple fields which includes a common service parameter and a transport channel-specific parameter. The common service parameter includes parameters that identify at least the BCMCS service and information on what channels the MBS will be communicating, ("providing a BCMCS_ID to identify the service"). Therefore, the broadcast service parameter message of Hsu identifies the service.

Therefore, the Examiner believes and maintains that Hsu teaches of providing a BCMCS_ID to identify the broadcast service, wherein an IP multicast address and UDP port number are associated with said BCMCS_ID."

Applicants respectfully traverse these rejections for at least the following reasons.

Claims 1, 16, 28 and 38

Claim 1 relates to a method in a wireless communication system that supports a broadcast service. This method comprises:

- providing a BCMCS ID to identify the broadcast service, wherein an IP multicast address and UDP port number are associated with said BCMCS_ID;
- sending the BCMCS ID to a base station;
- configuring a broadcast service parameters message at the base station that includes the BCMCS ID;
- transmitting the broadcast service parameters message to a mobile station; and
- using the BCMCS ID in the broadcast service parameters message at the mobile station to determine availability of the broadcast service in an adjacent sector.

As discussed at paragraphs 1067 and 1068 of the specification, associating the BCMCS_ID with an IP multicast address and UDP port number can allow a mobile station to

obtain the BCMCS_ID, IP multicast address, and UDP port number of a broadcast/multicast service via an out-of-band mechanism. The MS may obtain the mapping between the BCMCS_ID and the physical channel parameters via IS-2000 Layer-3 signaling. Using a BCMCS_ID with these associations avoids a layering violation that occurs when IP addresses and port numbers (or text-based service names in the IS-2000 Layer-3 signaling) are used to associate a broadcast/multicast service and physical channel parameters. Using a BCMCS_ID with these associations may also decrease signaling overhead by eliminating up to 10 bytes required to identify a service by its source/destination addresses and port numbers, or eliminating a large number of bytes that may be required to identify a service by its text-based service name.

Deficiencies of the Cited References

1. The Hsu reference fails to teach or suggest “providing a BCMCS ID to identify the broadcast service.”

Contrary to the Office’s assertion at page 9, paragraph 8 of the final Office Action, paragraphs 59-60 and fig. 4 of the Hsu reference does not teach or suggest “using a BCMCS_ID service and wherein an IP multicast address and UDP port number are associated with the BCMCS.” Applicants submit that neither the broadcast service parameter message, common service parameter nor the transport channel-specific parameter is an identifier for a broadcast service.

Applicants agree that paragraphs [0020]-[0022] of the Hsu reference disclose a broadcast service parameter message that has multiple fields which includes a **common service parameter** and a transport channel-specific parameter. Paragraph [0021] of the Hsu reference discloses that “[c]ommon service parameters include, for instance, parameters **identifying multicast group information**.” (Emphasis added.) Paragraph [0056] of the Hsu reference further defines the common service parameters.

Contrary to the Office’s assertion, however, the common service parameter does not include “**parameters that identify at least the BCMCS service**.” Rather, the common service parameters include, for instance, parameters identifying multicast group **information**, and **do not identify the service**, as asserted by the Office. As such, the “common service parameter message” of Hsu is not a BCMCS_ID since there is no indication in Hsu that the “common

service parameter message” is used to identify a broadcast service, as recited in claim 1. In addition, Applicants further submit that there is no disclosure in the Hsu reference of a **MBS ID** that identifies a broadcast service as alleged by the Office. Where is this disclosed in Hsu?

Accordingly, Applicants respectfully submit that Hsu fails to teach or suggest, for example, “providing a BCMCS ID to identify the broadcast service,” as recited in claim 1.

2. The Hsu reference does not teach or suggest that “an IP multicast address and UDP port number are associated with said BCMCS_ID.”

Moreover, the Hsu reference does not hint that “an IP multicast address and UDP port number are **associated with** said BCMCS_ID,” as recited in claim 1. Rather, the Hsu reference merely establishes that the general concept of utilizing “RTP/UDP/IP header compression” is known. Nothing in the Hsu reference even remotely suggests an **association** between an identifier for a broadcast service and an IP multicast address and UDP port number. Contrary to the Examiner’s assertion, FIG. 4 of the Hsu reference does not suggest that the RTP/UDP/IP header is **associated with** the common service parameter message. In addition, even assuming arguendo that the IPMC address and UDP port number are associated with a **BCMCS** (as erroneously asserted by the Office), nothing in Hsu suggests that the IPMC address and UDP port number are **associated with** a BCMCS_ID. A BCMCS and a BCMCS_ID are much different concepts.

Accordingly, Applicants submit that nothing in the Hsu reference suggests that “an IP multicast address and UDP port number are **associated with** said BCMCS_ID,” as required by claim 1.

Applicants further submit that the other cited references are similarly deficient.

Thus, Applicants respectfully submits that the cited references fail to teach or suggest at least the above recitations of claim 1. Accordingly, Applicants respectfully submits that claim 1 is patentable over the cited references. In addition, Applicants respectfully submits that dependent claims 2-5, 8-10, 13, and 15 are separately patentable at least by virtue of their dependency from independent claim 1, and also because those claims include features that are neither taught nor suggested by the cited references.

Applicants further submits that independent claims 16, 28, and 38 are patentable for at least the same reasons, and that dependent claims 16-19, 22-23, 27; and 28-31, 34-35, 37-38 are patentable at least by virtue of their dependency from independent claims 16 and 28, respectively.

REQUEST FOR ALLOWANCE

In view of the foregoing, Applicants submit that all pending claims in the application are patentable. Accordingly, reconsideration and allowance of this application are earnestly solicited. Should any issues remain unresolved, the Examiner is encouraged to telephone the undersigned at the number provided below.

Respectfully submitted,

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